

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012580**Date Inspected:** 11-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 6CW punch list item 486, Segment Tag #6 and 6AE Segment Tag #6. The weld designations reviewed are as follows:

6CW

1. SEG035A-031
2. SSD12A-PP046-183, 168
3. SSD11A-PP045-165, 178

6AE

1. SEG028H-001-114, 117, 118
2. SEG028H-001-096, 099, 100

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3. SEG028H-001-087, 090, 091

4. SEG028J-001-005, 008, 009

5. SEG028J-001-032, 035, 036

6. SEG028H-001-050, 053, 054

7BE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA036 on the bike path side of segment. Welder is identified as Mr. Chen Renzhi (058087). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1224 repair procedure.

Y locations or repair area by noted welder (058087) is between 4250mm~4300mm.

7AE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA034 on the bike path side of segment. Welder is identified as Mr. Yang Yunfeng (215553). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1210 repair procedure.

Y locations or repair area by noted welder (215553) is between 8700mm~8870mm.

7BW

Shield Metal Arc Welding (SMAW) welding (buttering ends) was performed on deck plate stiffeners located at panel point 37 counter weight side of segment. Welder is identified as Mr. Wang Changfa (058102). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and WR10965 repair procedure.

7BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 031 located at SEG035A on the counter weight side of segment. Welder is identified as Mr. Luo Xuanping (067610). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA034 on the bike path side of segment. Welder is identified as Mr. Chen Renzhi (058087). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1210 repair procedure.

7BW+7CW

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Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 009 located at OBW7B on the cross beam side of segment. Welder is identified as Mr. Feng Huajun (066258). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 009 located at OBW7B on the cross beam side of segment. Welder is identified as Mr. Zhang Quanfa (066326). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 010 located at OBW7B on the cross beam side of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBW7B on the bottom plate of segment. Welder is identified as Mr. Wang Jun (067752). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBW7B on the bottom plate of segment. Welder is identified as Mr. Li Zaijun (037996). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBW7B on the bottom plate of segment. Welder is identified as Mr. Ji Yunfeng (067589). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

### 6AE

During random in process observations of 6AE at OBG Trail Assembly line, this QA Inspector observed heat straightening was performed on FL3 plate member damaged at panel point (PP) 39 without an approved HSR. Contractor submittal AFC-CAL-TRN-0056649 and HSR (B)-357 procedure was present at time of work and states “area is damaged beyond the corrective means of heat straightening. Please submit an alternative repair procedure.” Submittal was stamped “Return for correction” by Caltrans Structural Representative on 03-03-10. This QA Inspector issued an incident report for today’s work shift.

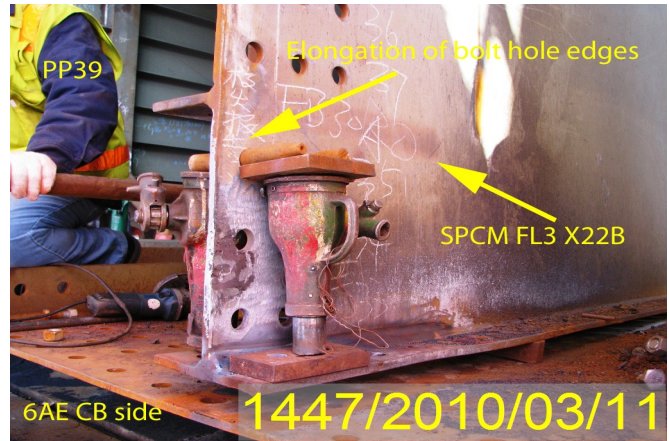
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Alaniz,Joe	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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